



March 15, 2022

Board of Public Works & Safety  
City of Lafayette  
20 North 6<sup>th</sup> Street  
Lafayette, IN 47901

Dear Board Members:

You have before you a Contract with Greeley and Hansen LLC regarding Combined Sewer Overflow (CSO) Long Term Control Plan (LTCP) Phase II-D. The scope of this Contract includes the following:

- Flow monitoring services and quality control
- Flow sampling
- Recalibration of the City's collection system model
- HRT alternative analysis
- Coordination with Indiana Dept. of Environmental Mgmt. (IDEM) to proactively discuss study results

Greeley and Hansen LLC will perform this work for a not-to-exceed amount of \$220,000. This contract was reviewed by the City Attorney and I recommend it for your approval.

Respectfully,

A handwritten signature in black ink, appearing to read "Brad W. Talley", is written over a horizontal line.

Brad W. Talley  
Superintendent  
Lafayette Renew



# AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

between

CITY OF LAFAYETTE, INDIANA

and

GREELEY AND HANSEN LLC

## **Article I. PARTIES AND PROJECT**

This AGREEMENT is made effective on the \_\_\_\_\_ day of \_\_\_\_\_ in the year 2022 between the City of Lafayette, Indiana, hereinafter referred to as CITY, and Greeley and Hansen LLC, an Illinois limited liability company, with its principal office at 100 South Wacker Drive, Chicago, Illinois 60606-4004, and a regional office at 7820 Innovation Boulevard, Suite 150, Indianapolis, Indiana 46278-2728, hereinafter referred to as ENGINEER, for professional engineering services in connection with the Combined Sewer Overflow (CSO) Long Term Control Plan (LTCP) Phase II-D Project, the PROJECT.

## **Article II. ENGINEER'S SERVICES**

ENGINEER shall provide appropriate professional engineering services as required to complete the scope of services as set forth hereinafter, and shall perform such services in conformance with the ordinary standards of care and skill of the engineering profession.

### **A. Basic Services**

The scope of the basic services for the PROJECT are set forth in Exhibit A attached hereto and made a part of this AGREEMENT. ENGINEER shall not perform services beyond the scope as defined in Exhibit A without the prior written authorization of CITY.

### **B. Additional Services**

ENGINEER may submit proposals for additional professional engineering services in connection with the PROJECT. Each proposal submitted shall detail the: (1) scope of additional services, (2) period of services, and (3) method and amount of compensation.

CITY shall provide written acceptance and authorization to ENGINEER prior to the commencement of work on any proposed additional services. Upon receipt by ENGINEER of written acceptance and authorization by CITY, each proposal for additional services in connection with the PROJECT shall become part of this AGREEMENT and shall be governed by the terms and conditions contained herein.

**C. Period of Services**

Upon receipt of CITY'S written notice to proceed, ENGINEER agrees that the basic services as described in Exhibit A will be completed according to the schedule provided in Exhibit C.

The period of services will begin upon the date of CITY'S written notice to proceed. ENGINEER shall not, however, be responsible for timely completion of basic services as agreed to herein if completion is delayed by the failure of CITY to furnish the services provided for under Article IV., hereof, in a timely manner, or for other reasons beyond the control of the ENGINEER.

ENGINEER further agrees that additional services will be substantially complete within the period specified in each accepted and authorized proposal for additional services, unless reasons for delay in completion are beyond the control of ENGINEER.

If ENGINEER'S basic services or any accepted and authorized additional services are delayed or suspended in whole or in part by the CITY for more than ninety days beyond the scheduled completion date for said basic or additional services for reasons beyond ENGINEER'S control, compensation for the delayed services, as provided in Article III. hereunder, shall be subject to renegotiation upon the written request of ENGINEER. However, such request must be submitted by ENGINEER to the CITY prior to the completion of the delayed services.

**Article III. ENGINEER'S COMPENSATION**

ENGINEER shall perform professional engineering services as provided in Article II. of this AGREEMENT for which CITY shall compensate ENGINEER as follows:

**A. Basic Services****1. Personnel Services**

ENGINEER shall be compensated for personnel services on the basis of actual annual average hourly rates paid to personnel assigned to the PROJECT for each hour of services rendered times a 3.2 factor to cover overhead and profit. Such rates shall be computed as actual annual base salary, in effect at the time the services are rendered, divided by 1,950 hours. Personnel services rates shall include applicable required overtime premium for covered employees.

**2. Subconsultants and Other Professional Associates**

CITY shall pay ENGINEER for the services of subconsultants and other professional associates at their invoiced fees to ENGINEER plus 10 percent.

**3. Reimbursable Direct Costs**

CITY shall pay ENGINEER the actual cost of any direct reimbursable expenses incurred in connection with performing the services.

**B. Additional Services**

Unless otherwise provided for in any accepted and authorized proposal for additional services, such services shall be compensated for on the same basis as provided for in Paragraph III. A., above, for basic services.

**C. Total Compensation**

Total compensation to ENGINEER for basic services under this AGREEMENT shall include full reimbursement for personnel services, subconsultants and other professional associates and reimbursable direct costs incurred in performing basic services, as described in



Paragraph III. A. It is agreed that the total compensation to ENGINEER for performing basic services will not exceed \$220,000, as set forth in Exhibit B, without prior approval of CITY. If at any time ENGINEER has reason to believe that the total cost to be incurred in the performance of the basic services will be greater than the total estimated cost for such services, ENGINEER shall notify the CITY in writing to that effect giving the detailed reasons for the change and revised estimate of such total cost for the performance of basic services.

The provisions of this Article III. C. shall also apply to each accepted and authorized proposal for additional services in connection with the PROJECT. However, the term "basic services", as used in this Article III. C., shall mean "additional services" and the terms "Exhibits A" and "Exhibit B" as used in this Article III. C. shall mean "the accepted and authorized proposal for additional services". The estimated compensation for any additional services, and the completion date beyond which these amounts are subject to renegotiation, shall be as specified in each such authorized proposal.

**D. Terminated Services**

If this AGREEMENT is terminated, ENGINEER shall be paid for services performed to the effective date of termination as follows:

1. For personnel services, the hours of services rendered at the established rates, to the effective date of termination times the factors established herein.
2. For services of subconsultants and other professional associates, their invoiced fees to ENGINEER, for services to the effective date of termination plus 10 percent.
3. For reimbursable direct costs, the actual cost of direct reimbursable expenses incurred to the effective date of termination.

**E. Conditions of Payment**

1. Progress payments shall be made in proportion to services rendered and expenses incurred as indicated within this AGREEMENT and shall be due and owing within thirty days of ENGINEER'S submittal of his progress payment invoices.
2. If CITY fails to make payments due ENGINEER within forty-five days of the submittal of any progress payment invoice, ENGINEER may, after giving fifteen days written notice to CITY, suspend services under this AGREEMENT.
3. No deduction shall be made from ENGINEER'S compensation on account of penalty, liquidated damages or other sums withheld from payments to construction contractors.
4. If the PROJECT is delayed, or if ENGINEER'S services for the PROJECT are delayed or suspended for more than ninety days for reasons beyond ENGINEER'S control, ENGINEER may, after giving fifteen days written notice to CITY, request renegotiation of compensation under Article II. C. or may terminate this AGREEMENT.

#### **Article IV. CITY'S RESPONSIBILITIES**

The CITY shall, as required:

- A. Provide all criteria and full information as to CITY'S requirements for the PROJECT, and furnish copies of all design and construction standards which the CITY will require to be included in the drawings and specifications.
- B. Assist ENGINEER by placing at ENGINEER'S disposal all available information pertinent to the PROJECT including CITY maps and plats, previous reports, drawings, specifications and any other data relative to the design or construction of the PROJECT.

- C. Furnish to ENGINEER property and land use data pertaining to the PROJECT available to the CITY including, but not limited to, property, boundary, easement, right-of-way, topographic and utility surveys; property descriptions; zoning, deed and other land use restrictions; and other related data.
- D. Provide legal, insurance and financial consulting services necessary for the PROJECT, and such accounting and auditing services as the CITY may require.
- E. Furnish permits and approvals from all governmental authorities having jurisdiction over the PROJECT and from others as may be necessary for completion of the PROJECT.
- F. Furnish above record information, property and land use data, and services at CITY'S expense in such manner that ENGINEER may rely upon them in the performance of services under this AGREEMENT.
- G. Furnish any laboratory analyses that may be required in connection with the PROJECT.
- H. Guarantee full and free access to ENGINEER to enter upon all public and private property required for the performance of ENGINEER'S services under this AGREEMENT.
- I. Designate in writing a person to act as CITY'S representative with respect to the services to be performed under this AGREEMENT. Such person shall have complete authority to transmit instructions, receive information, interpret and define CITY'S policies and decisions with respect to materials, equipment, elements and systems pertinent to ENGINEER'S services.
- J. Coordinate, consolidate, reconcile and bring congruence to differing views in the CITY'S organization to form single firm responses stating the CITY'S position on matters requiring resolution during performance of ENGINEER'S services. Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by ENGINEER



and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of ENGINEER. Render such decisions in a consolidated form reconciling differing views into an unambiguous single firm response to each matter requiring resolution.

- K. Provide ENGINEER with prompt written notice of any defect or suspected defect in ENGINEER'S performance of any services rendered pursuant to this AGREEMENT or relating to the PROJECT.
- L. In any agreement entered into between the CITY and other contractors for the PROJECT in which such contractors and their subcontractors agree to indemnify, provide insurance coverage to, and/or name as additional insured, the ENGINEER, its subconsultants, professional associates, and each of their officers, principals, partners and employees to the same extent as to the CITY. Furthermore, the CITY will provide ENGINEER with certificates of insurance from each such contractor or subcontractor.
- M. Give prompt written notice to ENGINEER whenever the CITY observes or otherwise becomes aware of any development that affects the scope or timing of ENGINEER'S services, or any defect in the work of construction contractors.
- N. Compensate ENGINEER in accordance with the provisions of Article III.

## **Article V. GENERAL PROVISIONS**

### **A. Ownership of Documents**

All reports, schedules, drawings, specifications and other products of services of ENGINEER for this PROJECT are instruments of service for this PROJECT only and shall remain the property of ENGINEER until the CITY has compensated ENGINEER in full for services rendered pursuant to the AGREEMENT. Upon final payment for each phase of Basic Services and for each separately accepted and authorized proposal for additional



services, ownership of the products or instruments of service for said phase or additional services authorized shall be vested in the CITY. ENGINEER, however, may retain record copies of all such instruments of service and may use such for ENGINEER'S exclusive purposes.

The ENGINEER'S instruments of service have been prepared for very specific purposes and the degree of accuracy and detail of the instruments of service are consistent with those purposes but they may not be useful for other purposes. Furthermore, misapplication of the ENGINEER'S instruments of service can cause occurrences that potentially have life/safety and financial consequences. The ENGINEER'S instruments of service are not intended or represented to be suitable for use by the CITY or by others acting for the CITY for other purposes on this PROJECT or on extensions of this PROJECT or on any other project without written verification, adaptation or completion by ENGINEER and, when applicable, associated compensation to ENGINEER.

Any changes or modifications to the instruments of service of ENGINEER which are introduced by anyone other than ENGINEER may have adverse consequences. Therefore, the change or modification of ENGINEER'S instruments of service by the CITY or by others acting for the CITY shall be at the CITY's sole risk and the CITY agrees, to the fullest extent permitted by law, to defend, indemnify and hold harmless ENGINEER from all claims, damages, and expenses, including attorney's fees, arising out of such change or modification.

Use of the instruments of service of ENGINEER on extensions of this PROJECT, or on any other project by the CITY or by others acting for the CITY, without verification or adaptation by ENGINEER and appropriate compensation therefore, shall be at the CITY'S sole risk and the CITY agrees, to the fullest extent permitted by law, to defend, indemnify and hold harmless ENGINEER from all claims, damages, and expenses, including attorney's fees, arising out of such use of ENGINEER'S instruments of service for this PROJECT.

**B. Data on Electronic Media**

Data delivered on electronic media are considered part of the ENGINEER'S instruments of service and, therefore, Article V.A. above applies to documents delivered on electronic media.

The form of ENGINEER'S drawings, specifications, reports, data or other information that may be relied upon are those which 1) are set forth on paper (also known as hard copies) and 2) are designated as final. Files in electronic media format of text, data, graphics, or other types are furnished only for convenience, not reliance by the CITY. Any conclusion or information obtained or derived from such electronic files will be at the CITY's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

Because files stored in electronic media format can contain irregularities, deteriorate or be modified inadvertently or otherwise without authorization of the ENGINEER, the transmitted electronic files should be examined by the CITY within 60 calendar days of receipt, after which time the CITY shall be deemed to have accepted the files thus transmitted. Any transmittal deficiencies detected within the 60-day acceptance period will be corrected by ENGINEER. Deficiency corrections requested after the acceptance period will be considered "additional services." ENGINEER is not responsible for irregularities, deterioration or modifications occurring or detected after the 60 calendar-day acceptance period.

ENGINEER 1) makes no representations as to the long-term usability or readability of the electronic files and 2) cannot be depended upon to maintain copies of the electronic files after the 60 calendar-day acceptance period. The documents will be in the software listed below designed for operation on a PC compatible computer under the associated operating system as listed below:

Type of Document	Software	Operating System
Word Processed Text	MS Word 365	Windows
Spreadsheets	MS Excel 365	Windows
CADD Drawings	Civil 3D	Windows

The ENGINEER makes no warranty as to the compatibility of electronic files beyond those versions. However, the ENGINEER reserves the right to submit documents in versions newer than those shown above.

ENGINEER makes no representations as to the compatibility, usability, or readability of the electronic files resulting from the use of software application packages, operating systems, or computer hardware (e.g. monitors, graphic cards and plotters) differing from those used by ENGINEER and its subconsultants. Also, the use of software application packages, operating systems and computer hardware different from those used by ENGINEER and its subconsultants may introduce errors and irregularities. Such occurrences are not the responsibility of ENGINEER and its subconsultants.

### **C. Successors and Assigns**

1. The CITY and ENGINEER each binds himself and his partners, successors, executors, administrators, assigns and legal representatives to the other party to this AGREEMENT and to the partners, successors, executors, administrators, assigns and legal representatives of such other party, in respect to all covenants, agreements and obligations of this AGREEMENT.
2. Neither the CITY nor ENGINEER shall assign or transfer any rights under or interest in this AGREEMENT without the written consent of the other, except as stated in Article V. C. 1. and to the extent that the effect of this limitation may be restricted by



law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this AGREEMENT. Nothing contained in this paragraph shall prevent ENGINEER from employing such independent subconsultants and associates as may be deemed appropriate to assist in the performance of services hereunder.

**D. Changes in Scope and Revisions**

The general category "additional services", referred to in Article II. B. may include services due to changes in the scope of the PROJECT, including, but not limited to, changes in size, complexity, schedule or character of the services and also may include revisions to instruments of service previously approved by the CITY or other revisions due to causes beyond the control of ENGINEER. All changes in scope and revisions shall require the written acceptance and authorization of the CITY prior to commencement of work, as provided in Article II. B.

This AGREEMENT takes into account the professional engineering and architectural signing and sealing requirements that are applicable as of the date of this AGREEMENT. Any changes to those requirements during the performance of the services associated with this AGREEMENT which cause revisions to the scope of the ENGINEER'S services or to the ENGINEER'S instruments of services shall be considered "additional services".

Proposals for services pursuant to changes in scope or revisions shall, upon CITY'S acceptance and authorization, become part of this AGREEMENT and shall be governed by the terms and conditions contained herein.

**E. Extent of AGREEMENT**

This AGREEMENT represents the entire understanding and agreement between the CITY and ENGINEER for professional engineering services pertaining to the PROJECT as described in Article II. and supersedes all prior negotiations, representations or agreements,



either written or oral. This AGREEMENT may be amended only by written instrument signed by both the CITY and ENGINEER.

**F. No Waiver**

Failure of the ENGINEER or the CITY to insist upon strict and punctual performance of any terms or conditions of this AGREEMENT shall not be construed to constitute a waiver of, or estoppel against, asserting the rights to require such performance. Neither shall a waiver nor an estoppel in one instance constitute a waiver or an estoppel with respect to a later default, whether similar or dissimilar in nature.

**G. Severability**

If any part of this AGREEMENT is determined by a court to be in conflict with statute or constitution or to be unlawful for any reason, the parties intend that the remaining provisions of this AGREEMENT shall remain in full force and effect unless the stricken provision leaves the remaining AGREEMENT unenforceable.

**H. Governing Law**

This AGREEMENT shall be governed by the laws of the State of Indiana.

**I. Subconsultants**

During the performance of the AGREEMENT, ENGINEER may engage such additional subconsultants or professional associates as may be appropriate for the timely completion of the services or to meet applicable requirements. The engagement of any subconsultants or professional associates shall be subject to the prior approval of the CITY.

**J. Insurance**

The ENGINEER shall at its own expense maintain in effect during the term of this contract the following insurance with limits as shown or greater:

1. General Liability (including automobile) with a combined single limit of \$1,000,000. The CITY shall be named as an Additional Insured to cover the

ENGINEER's indemnification obligation under this Agreement and be given a 30 day notice of cancellation, non-renewal or reduction in coverage. ENGINEER'S insurance shall be written on a "primary" basis and the CITY'S insurance program shall be in excess of all of ENGINEER'S available coverage.

2. Worker's Compensation at the statutory limit. Workers Compensation shall include a Waiver of Subrogation endorsement in favor of CITY.
3. Professional Liability for protection against claims arising out of performance of professional services caused by negligent error, omission or act in the amount of \$2,000,000.

The ENGINEER shall provide to the CITY Certificates of Insurance indicating the aforesaid coverage.

**K. ENGINEER'S Estimates of Cost and Standard of Care**

Since ENGINEER has no control over the cost of labor, materials, equipment or services furnished by others, or over contractors' methods of determining prices, or over competitive bidding or market conditions, ENGINEER'S estimates of project and construction costs are to be made on the basis of its experience and qualifications and represent its best judgment as an experienced and qualified professional engineering firm, familiar with the construction industry; but ENGINEER cannot and does not guarantee that proposals, bids or actual project or construction costs will not vary from ENGINEER'S estimates of cost.

Notwithstanding any other provisions in this AGREEMENT to the contrary, nothing herein contained shall be construed as:

1. Constituting a guarantee, warranty or assurance, either express or implied, that the engineering services will yield or accomplish a perfect outcome for the PROJECT; or
2. Obligating the ENGINEER to exercise professional skill and judgment different from that which can be reasonably expected from other engineers under like circumstances; or
3. An assumption by the ENGINEER of liability greater than or differing from those explicit in this AGREEMENT, or
4. An assumption by the ENGINEER of the liabilities of any other party.
5. An assumption by the ENGINEER for the construction means, methods, techniques, procedures, or safety precautions and programs in connection with the Project.

**L. Consequential Damages**

Notwithstanding anything to the contrary in this AGREEMENT, neither the CITY nor the ENGINEER shall have the right of recourse to the other party for any consequential damages incurred due to the fault of the CITY or ENGINEER, their employees, agents or subcontractors, irrespective of any forewarning of the potential for such damages arising.

**M. Termination**

This AGREEMENT may be terminated by the CITY without cause on thirty days written notice. If the PROJECT is delayed, or if ENGINEER'S services for the PROJECT are delayed or suspended for more than ninety days for reasons beyond ENGINEER'S control,

ENGINEER may request renegotiation of compensation in accordance with the provisions of Articles II. and III. or, after giving fifteen days written notice, terminate this AGREEMENT with cause. In the event of substantial failure to perform in accordance with the terms of this AGREEMENT, the party not at fault may terminate the AGREEMENT with cause on ten days written notice. If this AGREEMENT is terminated, ENGINEER shall be compensated for services performed to the effective date of termination in accordance with the provisions of Article III. of this AGREEMENT. Within sixty days following the date of receipt of the termination notice, and following receipt of compensation for services to date of termination, ENGINEER shall submit to the CITY copies of all reports, drawings, specifications and other products or instruments of service prepared prior to termination.

**N. Remedies**

Except as may be otherwise provided in this AGREEMENT, all claims, counter-claims, disputes and other matters in question between the CITY and ENGINEER arising out of or relating to this AGREEMENT or the breach thereof will be decided by arbitration if the PARTIES mutually agree or in an Indiana court of competent jurisdiction.

**O. Non-Discrimination and Equal Employment**

ENGINEER agrees:

1. That in the hiring of employees for the performance of work under this contract or any Subconsultant hereunder, no ENGINEER, or Subconsultant, nor any person acting on behalf of such ENGINEER or Subconsultant, shall, by reason of race, religion, color, sex, national origin or ancestry, discriminate against any citizen of the State of Indiana who is qualified and available to perform the work to which the employment relates.



2. That no ENGINEER, Subconsultant, nor any person on his behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of work under this contract on account of race, religion, color, sex, national origin or ancestry.
3. That the CITY may deduct from the amount payable to the ENGINEER a penalty of five dollars (\$5.00) for each person for each calendar day during which such person was found to have been discriminated against or intimidated in violation of the provisions of the contract.
4. If there is found to be a second or any subsequent violation of the terms or conditions of this section, then this contract may be cancelled or terminated by CITY and all money due or to become due hereunder will be forfeited.

**P. Engaging in activities with Iran**

By signing this Contract, ENGINEER certifies that it is not engaged in investment activities in the county of Iran as set forth in IC 5-22-16.5.

**Q. E-Verify**

ENGINEER shall comply with E-Verify Program as follows:

1. Pursuant to IC 22-5-1.7, ENGINEER shall enroll in and verify the work eligibility status of all newly hired employees of ENGINEER through the E-Verify Program ("Program"). ENGINEER is not required to verify the work eligibility status of all newly hired employees through the Program if the Program no longer exists.
2. ENGINEER and its Subconsultants shall not knowingly employ or contract with an unauthorized alien or retain an employee or contract with a person that ENGINEER or its Subconsultants subsequently learns is an unauthorized alien. If ENGINEER violates this Section, the CITY shall require ENGINEER to remedy the violation no later than thirty (30) days after the CITY notifies ENGINEER. If ENGINEER fails

to remedy the violation within the thirty (30) day period, the CITY shall terminate the contract for breach of contract. If the CITY terminates the contract, ENGINEER shall, in addition to any other contractual remedies, be liable to the CITY for actual damages. There is a rebuttable presumption that ENGINEER did not knowingly employ an unauthorized alien if ENGINEER verified the work eligibility status of the employee through the Program.

3. If ENGINEER employs or contracts with an unauthorized alien but the CITY determines that terminating the contract would be detrimental to the public interest or public property, the CITY may allow the contract to remain in effect until the CITY procures a new Engineer.
4. ENGINEER shall, prior to performing any work, require each Subconsultant to certify to ENGINEER that the Subconsultant does not knowingly employ or contract with an unauthorized alien and has enrolled in the Program. ENGINEER shall maintain on file a certification from each Subconsultant throughout the duration of the Project. If ENGINEER determines that a Subconsultant is in violation of this Section, ENGINEER may terminate its contract with the Subconsultant for such violation. Such termination may not be considered a breach of contract by ENGINEER or the Subconsultant.
5. By its signature below, ENGINEER swears or affirms that it i) has enrolled and is participating in the E-Verify program, ii) has provided documentation to the CITY that it has enrolled and is participating in the E-Verify program, and iii) does not knowingly employ an unauthorized alien.

**R. Indemnification**

CITY and ENGINEER each agree to indemnify and hold the other harmless, and their respective officers, employees, agents and representatives, from and against liability for all claims, losses, damages, and expenses, including reasonable attorney fees, to the extent such claims, losses, damages, or expenses are caused by the indemnifying party's

negligent acts, errors, or omissions. In the event claims, losses, damages, or expenses are caused by the joint or concurrent negligence of the CITY and ENGINEER, they shall be borne by each party in proportion to its negligence.

**S. Notices**

Any notices required hereunder or by law may be directed to the parties at the following addresses:

**To ENGINEER:**

Joseph Teusch, PE  
Office Director  
Greeley and Hansen LLC  
7820 Innovation Blvd, Suite 150  
Indianapolis, IN 46278-2728

**To CITY:**

Honorable Tony Roswarski  
Mayor  
City of Lafayette  
20 North 6<sup>th</sup> Street  
Lafayette, IN 47901-1412

All notices shall be deemed to be given when deposited with the United States Postal Service for first class mail delivery.

**Article VI. APPROVAL**

In WITNESS WHEREOF, the parties hereto have caused this AGREEMENT to be executed by their duly authorized officers and partners and is made effective the day and year first above written.

GREELEY AND HANSEN LLC




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 Joseph Teusch, PE

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 Authorized Representative

ATTEST:




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 Tim Healy, PE

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 Associate
CITY OF LAFAYETTE, INDIANA  
BOARD OF PUBLIC WORKS AND SAFETY

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 Gary Henriott

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 President

---

 Cindy Murray

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 Member

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 Norm Childress

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 Member

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 Ron Shriner

---

 Member

---

 Amy Moulton

---

 Member

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 Mindy Miller Riehle

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 1<sup>st</sup> Deputy Clerk

ATTEST:



## SCOPE OF SERVICES

This scope of work includes flow monitoring services and quality control, flow sampling, recalibration of the City's collection system model, HRT alternative analysis, coordination with the Indiana Department of Environmental Management (IDEM) to proactively discuss study results, such that any modification to the CSO LTCP will be expected by IDEM, and CSO LTCP modification quickly approved.

Scope of Services is as follows:

- 1.1 **Flow Monitoring.** Temporary flow monitors will be strategically placed in the collection system to measure wet weather flows. This flow data will be used to calibrate the collection system computer model, which is used to predict flows to future HRT Facility, Wet Weather Expansion of PRLS, and a Force Main connection from PRLS to the WWTP. In addition, the flow monitoring will be used in sizing the modifications to the CSO 002 diversion structure as well as confirm flows to the previously constructed Greenbush CSO Storage Tank at CSO 001.
  - 1.1.1 **Provide services and support for temporary flow monitoring.** It is assumed that up to ten (10) temporary flow meters will be provided for computer model recalibration. City will be responsible for the costs associated with meter rental, installation and maintenance. Request quotes from flow monitoring specialty contractors to provide flow monitoring services. Assist the City in evaluation of quotes received and selection of contractor to conduct flow monitoring, and engage selected flow monitoring specialty contractor to conduct flow monitoring in accordance with the scope of services. Provide up to 40 hours of services, as needed, to coordinate and support flow monitoring specialty contractor services described above. It is anticipated that two site visits be performed to confirm flow meter installation locations.
  - 1.1.2 **Perform quality control check on flow monitoring data.** Review flow monitoring data for consistency throughout flow monitoring period, and plot depth versus flow to compare data to Manning's Equation that governs open channel flow. EPA requires a quality assurance and quality control check of data used for modeling purposes per the Combined Sewer Overflows Guidance for Monitoring and Modeling (EPA 832-B-99-002, January 1999). Provide a summary of the storm events that occurred during the monitoring period (estimated to be up to six storm events). Perform quality control check on rain gauge data for the flow monitoring period. EPA requires a quality assurance and quality control check of data used for modeling purposes per the Combined Sewer Overflows Guidance for Monitoring and Modeling (EPA 832-B-99-002, January 1999).

Deliverables associated with this task include two bound copies and one electronic version of flow monitoring report provided by the flow monitoring sub-consultant. A memorandum will be prepared to summarize the storm events during the monitoring period and QA/QC checks performed related to the flow monitoring and rainfall data during the monitoring period. The memorandum will discuss the quality and quantity of rainfall events and flow data to be used in the Model Calibration Technical Memorandum.

**1.2 Model Recalibration.** Update the XPSWMM collection system model (model) to include collection system improvements that have occurred since the 2020 collection system model recalibration. Calibrate the updated collection system model to properly size the HRT Facility, Wet Weather Expansion of PRLS and Force Main from PRLS to WWTP, and modifications to the CSO 002 diversion structure as follows:

**1.2.1 Update Model.** Update the model to reflect the following collection system improvements:

- PRLS CSO Storage Facility
- CSO 015 Service Area Sewer Separation

**1.2.2 Adjust Model Parameters.** Run the rainfall from the flow monitoring period through the model and compare flow volume and peak flow rate at each flow monitor location between the model output and the meter data. Adjust model parameters to match flow monitoring data and verify adjustments with one storm. Present the model adjustment results to City staff.

**1.2.3 Summarize Overflow Volume and Peak Flow Rate for CSOs.** Run the typical year rainfall through the model and summarize model calculated overflow volume and peak flow rate at each CSO location.

**1.2.4 Model Calibration Technical Memorandum.** Prepare draft and final Model Calibration Technical Memorandum.

**1.2.5 Update CSO Overflow Matrix.** Run all design storms through the model, update the CSO Overflow Matrix for the CSO Discharge Monitoring Report (DMR) used to complete Monthly Report of Operations (as required by the City's National Pollutant Discharge Elimination System) and submit updated matrix to the City.

Conduct a meeting with the City to present the draft Model Calibration Technical Memorandum. Prepare and distribute meeting materials and notes within five (5) business days of each meeting. Submit final Model Calibration Technical Memorandum as electronic PDF along with two paper copies.

Deliverables associated with this task include an electronic version of the model, including three (3) bound copies and one (1) electronic copy of both draft and final Model Calibration Technical Memorandum and an updated CSO overflow matrix for the purpose of reporting of CSO activity on the CSO MRO. Deliverables also include agenda, meeting materials and meeting notes within five (5) business days of Model Calibration Technical Memorandum meeting.

**1.3 HRT Alternative Analysis.** In order to select the most cost effective and reliable high-rate treatment solution for the City, an analysis of up to three (3) HRT technologies will be compared. A recommended sampling plan to analyze the high-rate treatment influent will also be provided along with any facilitation of sampling.



- 1.3.1 **Basis of Design and Cost Opinion.** This analysis will develop cost opinions for the HRT component of the project. Cost comparisons of alternative HRT technologies will be made from vendor quotations for each technology. Cost analysis will include capital, operations and maintenance costs. Furthermore, processes that are energy intensive, such as pumping of large peak flows associated with HRT, should also be evaluated in terms of the impact on the utilities carbon footprint. The construction footprint required by different alternatives (or combinations of technology) at specific locations will establish boundaries, or constraints for the hydraulic modeling analysis. This task will take place concurrently with the flow monitoring and model recalibration such that it is complete prior to the commencing of the hydraulic modeling analysis.
- 1.3.2 **Existing HRT Facilities.** Identify references for up to three (3) HRT technologies and conduct interviews with up to three (3) utilities that are using each of the identified HRT technologies for a total of up to nine (9) interviews. Interview will focus on capital cost, system performance (compliance with regulatory requirements), operation and maintenance cost both in dollars but also in staff time. Final interview question will ask if utility would recommend the HRT technology.
- 1.3.3 **HRT Facility Site Visits.** Up to six (6) site visits to HRT installations shall be conducted for design, operations and maintenance guidance.
- 1.3.4 **HRT Influent Sampling.** The wet weather testing protocol evaluation will include characterization of the HRT facility influent over time. Laboratory analysis of all samples will be handled by the City's laboratory. The samples will be analyzed for the following parameters, however, since cBOD<sub>5</sub> testing is demanding in terms of labor, time, and supplies, all samples will be analyzed for COD and possibly 1 of every 4 samples (to be determined by the City) will be analyzed for cBOD<sub>5</sub> to establish a COD to cBOD<sub>5</sub> relationship. If determined necessary by laboratory staff, some analyses may also be performed by a third-party laboratory.
- TSS
  - COD
  - cBOD<sub>5</sub> (See discussion above regarding number of samples)
  - NH<sub>4</sub>-N
  - Total Phosphorus, as necessary
  - Ultraviolet Transmittance, UV at frequency of 254 nm
  - Turbidity (by AASI supplied on-line turbidity meters)

The parameters above will be tested on all the samples. *E-coli* grab samples will be collected every 2 to 4 hours during the events. When collecting E-coli grab samples, the collection times of the samples will be recorded and logged. It is anticipated that four site visits will be performed to assist in the facilitation of sampling.



Deliverables associated with this task will be a detailed cost opinion, construction footprint, and documentation and analysis of HRT influent samples' test results, in the Technical Memorandum.

- 1.4 Sizing of CSO 002 – Salem Street Diversion Structure Modifications:** Utilize results of model recalibration to determine final size of modification to CSO 002 (Salem Street) diversion structure to meet four (4) overflows or less in the Typical Year.

Deliverables associated with this task will be documentation of CSO 002 Diversion Structure modification, in the Technical Memorandum

- 1.5 Recommended Alternative Technical Memorandum.** Utilize the updated and recalibrated collection system model to evaluate final sizing needed for this component of the LTCP. Results from the hydraulic modeling, cost opinion, construction footprint and sampling will be summarized into a Technical Memorandum. Conduct up to two (2) meetings with the City to present up to three (3) draft alternatives, receive feedback on the alternatives, screen for the two most promising alternatives, and then conduct a final meeting to present the refined alternatives and select a final alternative. The final alternative will include recommended sizing, location, capital and O&M cost, general facility arrangement and schedule.

Deliverables associated with this task include development of up to three (3) alternative technologies for HRT that will comply with the required level of control. Meeting agenda along with PDF figures detailing the alternatives to be sent electronically five (5) days prior to the meeting and meeting notes distributed within five (5) days of the meeting.

The final deliverable under this task will be two printed and one electronic PDF that summarizes the selected alternative including recommended sizing, location, capital and O&M cost, construction footprint and schedule.

- 1.6 CSO LTCP Compliance Coordination.** Coordinate and conduct the following meeting and correspondence between IDEM and the City to maintain compliance with the CSO LTCP while also updating and right-sizing future LTCP components.

- 1.6.1 IDEM Meeting.** Conduct meeting at IDEM and update the final Technical Memorandum with IDEM comments and questions. The objectives of the meeting shall include:

- 1.6.1.1** Discuss and obtain IDEM input on HRT design guidance relative to sizing and treatment required based on size of storm. Share initial system size and layout and answer any questions or concerns from IDEM.
- 1.6.1.2** Provide update on flow monitoring and subsequent model recalibration, and how the recalibration affects all component sizes of Phase II-D of the LTCP.

- 1.6.2 **Phase II-C Post-Construction Documentation.** Prepare letter to IDEM to close out Phase II-C of the CSO LTCP. Summarize flow monitoring and model recalibration efforts for Phase II-C, documenting that the constructed project meets the required level of control.
- 1.6.3 **Phase II-D Commencement Documentation.** Prepare letter to notify IDEM that the planning phase of Phase II-D has commenced.
- 1.6.4 **CSO LTCP Update.** Prepare update to Section 8 of the City of Lafayette CSO LTCP, which describes the Recommended Plan, to document updates of component sizes of Phase II-D.
- 1.6.5 **CSO DMR Update.** Prepare letter to notify IDEM of completion of model recalibration and subsequent update to the CSO DMR used for monthly CSO discharge reporting.

Deliverables include preparation and distribution of meeting agendas to be sent electronically five (5) days prior to the meeting and notes distributed within five (5) days of meeting. Other deliverables are letters to notify IDEM of completion of Phase II-C and commencement of Phase II-D, an update to Section 8 of the CSO LTCP, and a letter to notify IDEM of model recalibration completion and CSO DMR update.

**EXHIBIT B**

**AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES**

between

CITY OF LAFAYETTE

and

GREELEY AND HANSEN LLC

**Estimated Compensation**

**COMBINED SEWER OVERFLOW LONG TERM CONTROL PLAN PHASE II-D**

		Hours	Hourly Rates	Cost
1. Greeley and Hansen Labor:				
a. Project Director		89	\$195	\$17,355
b. Project Manager		269	\$145	\$38,978
c. Technical Specialist		66	\$250	\$16,500
d. Engineer / Modeling Specialist		1078	\$130	\$140,140
e. Designer / CAD Tech		26	\$125	\$3,250
f. Word Processor		22	\$85	\$1,870
Subtotal		1,550		\$218,093
2. Subconsultant Costs - None				
3. Other Direct Costs				
a. Local Travel <sup>(1)</sup>	920 Miles @		\$0.585 / m	\$538
b. Site Visits <sup>(2)</sup>	2,400 Miles @		\$0.585 / m	\$1,404
Subtotal				\$1,942
4. Total Compensation (Rounded)				\$220,000

<sup>(1)</sup> Based on 8 trips at 115 miles per trip.

<sup>(2)</sup> Based on 6 trips at 400 miles per trip.



**EXHIBIT B**

**AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES**

between

CITY OF LAFAYETTE

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**Estimated Level of Effort**

**COMBINED SEWER OVERFLOW LONG TERM CONTROL PLAN PHASE II-D**

Task Description	Estimated Workhours							Estimated Compensation	
	Project Director	Project Manager	Technical Specialist	Engineer / Modeling Specialist	Designer / CAD Tech	Word Processor	Total Hours	Totals	
1.1 FLOW MONITORING									
1.1.1 Temporary Flow Monitoring Services	2	8	0	40	4	0	54	\$	7,249
1.1.2 Flow Monitoring QA/QC	2	12	0	116	0	0	130	\$	17,209
Subtotal	4	20	0	156	4	0	184	\$	24,458
1.2 MODEL RECALIBRATION									
1.2.1 Reconfigure / Update Model	4	20	0	40	0	0	64	\$	8,878
1.2.2 Recalibrate Using Rainfall from Flow Monitoring Period	20	60	0	200	0	0	280	\$	38,594
1.2.3 Run Typical Year Current Conditions Model	2	2	0	40	0	0	44	\$	5,880
1.2.4 Draft and Final Recalibration Memo	4	20	0	80	4	4	112	\$	14,918
1.2.5 Run Design Storms Current Conditions Model	0	8	0	80	0	0	88	\$	11,559
Subtotal	30	110	0	440	4	4	588	\$	79,829
1.3 HRT ALTERNATIVE ANALYSIS									
1.3.1 Basis of Design and Opinion of Probable Cost	16	40	16	200	8	8	288	\$	40,596
1.3.2 Existing HRT Facilities	4	16	10	40	0	0	70	\$	10,798
1.3.3 HRT Facility Site Visits	16	24	8	80	0	0	128	\$	18,998
1.3.4 HRT Influent Sampling	0	16	16	20	0	0	52	\$	8,918
Subtotal	36	96	50	340	8	8	538	\$	79,310
1.4 CSO 002 - SALEM ST. DIVERSION STRUCTURE MODIFICATION									
Basis of Design	2	8	0	24	0	0	34	\$	4,669
Subtotal	2	8	0	24	0	0	34	\$	4,669
1.5 RECOMMENDED ALTERNATIVE TECHNICAL MEMORANDUM									
Technical Memorandum	8	20	16	80	8	8	140	\$	20,538
Subtotal	8	20	16	80	8	8	140	\$	20,538
1.6 CSO LTCP COMPLIANCE COORDINATION									
1.6.1 IDEM Meeting	4	8	0	16	0	0	28	\$	4,019
1.6.2 Phase II-C Post-Construction Documentation	1	1	0	2	0	0	4	\$	600
1.6.3 Phase II-D Commencement Documentation	1	1	0	2	0	0	4	\$	600
1.6.4 CSO LTCP Update	2	4	0	16	2	2	26	\$	3,470
1.6.5 CSO DMR Update	1	1	0	2	0	0	4	\$	600
Subtotal	9	15	0	38	2	2	66	\$	9,289
Total	89	269	66	1078	26	22	1550	\$	218,093

Exhibit C

COMBINED SEWER OVERFLOW (CSO) LONG TERM CONTROL PLAN (LTCP) PHASE II-D

Project Schedule

City of Lafayette

Milestone	Date
Notice to Proceed	Friday, April 1, 2022
Kickoff Meeting	Thursday, April 14, 2022
Installation of Flow Meters	Monday, May 2, 2022
Progress Meeting #1 - HRT Overview	Tuesday, May 17, 2022
Progress Meeting #2 - HRT Technology Screening Workshop	Thursday, June 16, 2022
Progress Meeting #3 - Flow Monitoring Update - Start Model Recalibration	Thursday, July 14, 2022
HRT Site Visits	July - September 2022
Progress Meeting #4 - HRT Site Visit Debrief - Flow Monitoring Update	Tuesday, September 20, 2022
Progress Meeting #5 - Draft Technical Memo - Flow Monitoring Update	Thursday, November 10, 2022
Meeting with IDEM - Present Tech Memo	Wednesday, December 14, 2022
Model Recalibration Report	Thursday, January 5, 2023
Final Technical Memorandum	Thursday, January 19, 2023

AGREEMENT FOR PROFESSIONAL SERVICES

between

CITY OF LAFAYETTE

and

GREELEY AND HANSEN LLC

SCOPE OF BASIC ENGINEERING SERVICES

COMBINED SEWER OVERFLOW (CSO) LONG TERM CONTROL PLAN (LTCP) PHASE II-D

HIGH-RATE TREATMENT FACILITY AT CSO 009, WET WEATHER EXPANSION OF PEARL RIVER LIFT STATION  
(PRLS) AND FORCE MAIN FROM PRLS TO WASTEWATER TREATMENT PLANT

March 2022

The City of Lafayette's (City) approved Combined Sewer Overflow Long Term Control Plan (CSO LTCP) requires a level of control of four (4) CSO overflows per year. To achieve this level of control, the recommended plan was divided into four (4) sub-phases (Phase II-A, II-B, II-C and II-D). As Phase II-C is nearing completion, the final phase includes Phase II-D, in which the City is required to plan, design and construct a High-Rate Treatment (HRT) facility in the area near CSO 009 site (adjacent to WWTP), Wet Weather Expansion of Pearl River Lift Station (PRLS), and a Force Main connecting the PRLS to the HRT facility. The culmination of the planning, design, construction, and post-construction flow monitoring of Phase II-D will conclude more than 20 years of work to reduce CSOs in the City, fulfilling regulatory requirements while protecting public health and the environment and providing benefits to the community.

In 2020, a full collection system-wide recalibration was performed using the City's collection system model, and results from the recalibration demonstrated the size of each of the Phase II-D components may potentially be reduced by up to 50%, reducing the total capital cost required to implement Phase II-D while maintaining the same level of control. Following a major system-wide model recalibration, targeted flow monitoring around the location of the specific project areas is a crucial part of the planning process, to aid in right-sizing project components in Phase II-D of the CSO LTCP by accounting for newly constructed infrastructure and quantifying flows for the new HRT facility. The flow monitoring provides real world stormwater flows to calibrate the collection system model and cost-effectively size the HRT facility to meet CSO LTCP compliance. Significant rain events are needed during the flow monitoring period for effective planning, and therefore a flow monitoring period of up to 12 months is proposed to provide flexibility in the planning phase.

Similarly, the planning period will allow the City to evaluate available HRT technologies available, pilot test technologies, assess HRT footprints and cost, and select the most cost-effective technology prior to project design.